

# SEQUENCE LISTING

<110> Xiao, Yonghong  
Gedrich, Richard

<120> Regulation of Human transmembrane Serine  
Protease

<130> 02973.00035

<150> US 60/211,224

<151> 2000-06-13

<150> US 60/283,353

<151> 2001-04-13

<150> US 60/283,648

<151> 2001-04-16

<150> PCT \_\_\_\_\_ (Docket No. LIO-81-WO)

<151> 2001-06-12

<160> 36

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 402

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> (1)...(402)

<223> n = A,T,C or G

<400> 1

aatgcccttc ccagcgggat atctccctcc agtgttccca ctgcggactg agggccatga	60
ccgggcggat cgtgggaggg gcgctggcct cggatagcaa gtggccttgg caagtgagcc	120
tgcacttcgg caccacccac atctgtggag gcacgctcat tgacgccag tgggtgtca	180
ctnccgcca ctgcttcttc gtgnaccgag gagaagggtcc tggagggctg gaaggtgtac	240
gcgggcacca gcaacctgca ccagttgcct gaggcagcct ccattgccga gatcatcatc	300
aacagcaatt acaccgatga ggaggacgac tatgacatcg ccctcatgcg gctgttcaag	360
ncccttgacc ctgttcgggt gaggaattt tgcatttccc gt	402

02973.00035  
LBRI-147  
LIO-81

<210> 2  
 <211> 285  
 <212> DNA  
 <213> Homo sapiens

<400> 2  
 ccatgaccgg gcggtatcgtg ggagggggcgc tggcctcgga tagcaagtgg ccttggcaag 60  
 tgagtctgca cttcggcacc acccacatct gtggaggcac gctcattgac gcccagtggg 120  
 tgctcactgc cgcccactgc ttcttcgtga cccgggagaa ggctcctggag ggctggaagg 180  
 tgtacgcggg caccagcaac ctgcaccagt tgcctgaggc agcctccatt gccgagatca 240  
 tcatcaacag caattacacc gatgaggagg acgactatga catcg 285

<210> 3  
 <211> 600  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> (1)...(600)  
 <223> n = A,T,C or G

<400> 3  
 gagggctgga aggtgtacgc gggcaccagc aacctgcacc agttgcctga ggcagcctcc 60  
 attgccgaga tcatcatcaa cagcaattac accgatgagg aggacgacta tgacatcgcc 120  
 ctcatgcggc tgtccaagcc cctgaccctg tccggtgagg gaatctgcac tccccgctct 180  
 cctgcccccc agccccagca ccctctgcag ccctcgcaact tgtcagcatc tgtcaactca 240  
 tatccggggc ccaaagcttc tgcagggcag aagtcaaaga ctcttaaaga tccttacatg 300  
 gaacacttct gttttataat tagggaaact gaagcccaag gggttataaat aagtttgctc 360  
 caaatgacac atctcacatt acaaattgat gacggagtca gggcttgggt actgatctta 420  
 atcaatagat tgaattcttt cactgggtatt aactgagcac ctagggggcca aacgctatgg 480  
 taggcatttc acacatatga ttctatttac tcttcacaac caaccctgtg gagcaggcac 540  
 tattattaac ttcatttgac atatgangaa atggagcttt acagagagat aattacctga 600

<210> 4  
 <211> 591  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> (1)...(591)  
 <223> n = A,T,C or G

<400> 4  
 gagggctgga aggtgtacgc gggcaccagc aacctgcacc agttgcctga ggcagcctcc 60  
 attgccgaga tcatcatcaa cagcaattac accgatgagg aggacgacta tgacatcgcc 120  
 ctcatgcggc tgtccaagcc cctgaccctg tccggtgagg gaatctgcac tccccgctct 180  
 cctgcccccc agccccagca ccctctgcag ccctcgcaact tgtcagcatc tgtcaactca 240  
 tatccggggc ccaaagcttc tgcagggcag aagtcaaaga ctcttaaaga tccttacatg 300  
 gaacacttct gttttataat tagggaaact gaagcccaag gggttataaat aagtttgctc 360  
 caaatgacac atctcacatt acaaattgat gacggagtca gggcttgggt actgatctta 420

02973.00035  
 LBRI-147  
 LIO-81

atcaatagat	tgaattcttt	cactggtatt	aactgagcac	ctagggggcca	aacgctatgg	480
taggcatttc	acacatatga	tttcatttac	tcttcacaac	caaccctgtg	gagcangcac	540
tattattaac	ttcatttgac	atatgangaa	atggagcttt	acagagagat	a	591

<210> 5  
 <211> 286  
 <212> DNA  
 <213> Homo sapiens

<400> 5						
gcgatgtcat	agtcgtcctc	ctcatcggcg	taattgctgt	tgatgatgat	ctcggcaatg	60
gaggctgcct	caggcaactg	gtgcaggttg	ctggtgcccg	cgtaacacct	ccagccctcc	120
aagaccttct	cccgggtcac	gaagaagcag	tggcgggcag	tgagcaccca	ctgggcgtca	180
atgagcgtgc	ctccacagat	gtgggtggtg	ccgaagtgtc	gactcaactg	ccaaggccac	240
ttgctattcg	aggccagcgc	cccttcacag	attcgcccgg	tcattgg		286

<210> 6  
 <211> 384  
 <212> DNA  
 <213> Homo sapiens

<400> 6						
gagggctgga	aggtgtacgc	gggcaccagc	aacctgcacc	agttgcctga	ggagcctcca	60
ttgccgagat	catcatcaac	agcaattaca	ccgatgagga	ggacgactat	gacatcgccc	120
tcattgcggct	gtccaagccc	ctgacctgtg	ccggtgaggg	aactctgact	ccccgctctc	180
ctgcccccca	gccccagcac	cctctgcagc	cctcgcaact	gtcagcatct	gtcaactcat	240
atccggggccc	caaagcttct	gcagggcgaga	agtcaaagac	tcttaaagat	ccttacatgg	300
aacacttctg	ttttataatt	agggaaactg	aagcccaagg	gttataaata	agtttgctcc	360
aaatgacaca	tctcacatta	caaa				384

<210> 7  
 <211> 471  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> (1)...(471)  
 <223> n = A,T,C or G

<400> 7						
tttttttttt	nttttttttt	ttggagcaaa	cttatttana	acccttgggc	ttcagttnc	60
ctaattataa	aacagaagtn	tnccatgtaa	ggnncttnaa	gagtctttga	cttctgccct	120
gcagaagctt	tggggcccg	atatgagttg	acagatgctg	acaagtgcga	gggctgcaga	180
gggtntctgg	gctggggggc	aggagagcgg	ggagtgcaga	ttccctcacc	ggacagggtc	240
aggggnttgg	acagccgcat	gagggcgatg	tcatagtcgt	cctcctcacc	ggtgtaattn	300
ctnttgatga	tgatctcggc	aatggaggct	gcctcaggca	actgggtnc	ggtntctggg	360
tnccncgta	acaccttcca	gccttcagag	nccttttccc	gggtcacgaa	gaagcagtn	420
ggccgcaatt	agcaccact	gggggtcaat	gaggtgccc	ccacanattt	g	471

02973.00035  
 LBRI-147  
 LIO-81

<210> 8  
 <211> 235  
 <212> DNA  
 <213> Homo sapiens

<400> 8  
 gggctggaag gtgtacgcgg gcaccagcaa cctgcaccag ttgcctgagc agcctccatt 60  
 gccgagatca tcatcaacag caattacacc gatgaggagg acgactatga catcgccctc 120  
 atgcggctgt ccaagcccct gaccctgtcc ggtgaggga tctgcactcc ccgctctcct 180  
 gccccccagc cccagcacc cctgcagccc tcgcacttgt cagcatctgt caact 235

<210> 9  
 <211> 19  
 <212> DNA  
 <213> Homo sapiens

<400> 9  
 ctgccagcag ctgggttttc 19

<210> 10  
 <211> 20  
 <212> DNA  
 <213> Homo sapiens

<400> 10  
 aggctttcct ggatggtgga 20

<210> 11  
 <211> 1748  
 <212> DNA  
 <213> Homo sapiens

<400> 11  
 ctcagagacc atggagaggg acagccacgg gaatgcatct ccagcaagaa caccttcagc 60  
 tggagcatct ccagcccagg catctccagc tgggacacct ccaggccggg catctccagc 120  
 ccaggcatct ccagcccagg catctccagc tgggacacct ccaggccggg catctccagc 180  
 ccaggcatct ccagctggta cacctccagg ccgggcatct ccaggccggg catctccagc 240  
 ccaggcatct ccagcccggg catctccggc tctggcatca ctttccagg cctcatccgg 300  
 caggctcatca tccgccagg cagcctcggg gacaacctcc ccaaccagag tgtacctgt 360  
 tagagcaaca ccagtggggg ctgtaccat ccgatcatct cctgccagg cagcaccagc 420  
 aaccagggcc accagggaga gccaggtac gagcctgccc aagttcacct ggccgggagg 480  
 ccagaagcag ctaccgctca tccgggtgct gctcctcctc attgccctgg tggtttcgct 540  
 catcatcctc ttccagttct ggcagggcca cacagggatc aggtacaagg agcagaggga 600  
 gagctgtccc aagcacgctg ttcgctgtga cggggtggg gactgcaagc tgaagagtga 660  
 cgagctgggc tgcgtgagg ttgactggga caagtctctg cttaaaatct actctgggtc 720  
 ctcccatcag tggcttccca tctgtagcag caactggaat gactcctact cagagaagac 780  
 ctgccagcag ctgggtttcg agagtgtca ccggacaacc gaggttgccc acagggattt 840  
 tgccaacagc ttctcaatct tgagatacaa ctccaccatc caggaaagcc tccacaggtc 900  
 tgaatgccct tcccagcggg atatctccct ccagtgttcc cactgaggac tgagggccat 960  
 gaccgggcgg atcgtgggag gggcgctggc ctccgatagc aagtggcctt ggcaagtga 1020  
 tctgcacttc ggcaccacc acatctgtgg aggcacgctc attgacgcc agtgggtgct 1080  
 cactgccgcc cactgcttct tcgtgacctg ggagaaggtc ctggagggct ggaagggtga 1140

02973.00035  
 LBRI-147  
 LIO-81

```

cgcggggcacc agcaacctgc accagttgcc tgaggcagcc tccattgccg agatcatcat 1200
caacagcaat tacaccgatg aggaggacga ctatgacatc gccctcatgc ggctgtccaa 1260
gcccctgacc ctgtccgctc acatccaccc tgcttgctc cccatgcatg gacagacctt 1320
tagcctcaat gagacctgct ggatcacagg ctttggaag accagggaga cagatgacaa 1380
gacatcccc ttctccggg aggtgcaggt caatctcatc gacttcaaga aatgcaatga 1440
ctacttggtc tatgacagtt accttacccc aaggatgatg tgtgctgggg accttcgtgg 1500
gggcagagac tctgccagg gagacagcgg ggggcctctt gtctgtgagc agaacaaccg 1560
ctggtacctg gcaggtgtca ccagctgggg cacaggctgt ggccagagaa acaaacctgg 1620
tgtgtacacc aaagtgcag aagttcttcc ctggatttac agcaagatgg agagcgaggt 1680
gcgattcaga aaatcctaac cagctggcct gctgctctgc acagcaccgg ctgctgtgac 1740
tcgagaaa 1748

```

```

<210> 12
<211> 562
<212> PRT
<213> Homo sapiens

```

```

<400> 12
Met Glu Arg Asp Ser His Gly Asn Ala Ser Pro Ala Arg Thr Pro Ser
1 5 10 15
Ala Gly Ala Ser Pro Ala Gln Ala Ser Pro Ala Gly Thr Pro Pro Gly
20 25 30
Arg Ala Ser Pro Ala Gln Ala Ser Pro Ala Gln Ala Ser Pro Ala Gly
35 40 45
Thr Pro Pro Gly Arg Ala Ser Pro Ala Gln Ala Ser Pro Ala Gly Thr
50 55 60
Pro Pro Gly Arg Ala Ser Pro Gly Arg Ala Ser Pro Ala Gln Ala Ser
65 70 75 80
Pro Ala Arg Ala Ser Pro Ala Leu Ala Ser Leu Ser Arg Ser Ser Ser
85 90 95
Gly Arg Ser Ser Ser Ala Arg Ser Ala Ser Val Thr Thr Ser Pro Thr
100 105 110
Arg Val Tyr Leu Val Arg Ala Thr Pro Val Gly Ala Val Pro Ile Arg
115 120 125
Ser Ser Pro Ala Arg Ser Ala Pro Ala Thr Arg Ala Thr Arg Glu Ser
130 135 140
Pro Gly Thr Ser Leu Pro Lys Phe Thr Trp Arg Glu Gly Gln Lys Gln
145 150 155 160
Leu Pro Leu Ile Gly Cys Val Leu Leu Leu Ile Ala Leu Val Val Ser
165 170 175
Leu Ile Ile Leu Phe Gln Phe Trp Gln Gly His Thr Gly Ile Arg Tyr
180 185 190
Lys Glu Gln Arg Glu Ser Cys Pro Lys His Ala Val Arg Cys Asp Gly
195 200 205
Val Val Asp Cys Lys Leu Lys Ser Asp Glu Leu Gly Cys Val Arg Phe
210 215 220
Asp Trp Asp Lys Ser Leu Leu Lys Ile Tyr Ser Gly Ser Ser His Gln
225 230 235 240
Trp Leu Pro Ile Cys Ser Ser Asn Trp Asn Asp Ser Tyr Ser Glu Lys
245 250 255
Thr Cys Gln Gln Leu Gly Phe Glu Ser Ala His Arg Thr Thr Glu Val
260 265 270

```

02973.00035  
LBRI-147  
LIO-81



<210> 14  
 <211> 492  
 <212> PRT  
 <213> Homo sapiens

<400> 14

Met	Ala	Leu	Asn	Ser	Gly	Ser	Pro	Pro	Ala	Ile	Gly	Pro	Tyr	Tyr	Glu
1				5					10					15	
Asn	His	Gly	Tyr	Gln	Pro	Glu	Asn	Pro	Tyr	Pro	Ala	Gln	Pro	Thr	Val
		20						25					30		
Val	Pro	Thr	Val	Tyr	Glu	Val	His	Pro	Ala	Gln	Tyr	Tyr	Pro	Ser	Pro
		35					40					45			
Val	Pro	Gln	Tyr	Ala	Pro	Arg	Val	Leu	Thr	Gln	Ala	Ser	Asn	Pro	Val
		50				55					60				
Val	Cys	Thr	Gln	Pro	Lys	Ser	Pro	Ser	Gly	Thr	Val	Cys	Thr	Ser	Lys
65					70					75					80
Thr	Lys	Lys	Ala	Leu	Cys	Ile	Thr	Leu	Thr	Leu	Gly	Thr	Phe	Leu	Val
				85					90					95	
Gly	Ala	Ala	Leu	Ala	Ala	Gly	Leu	Leu	Trp	Lys	Phe	Met	Gly	Ser	Lys
			100					105					110		
Cys	Ser	Asn	Ser	Gly	Ile	Glu	Cys	Asp	Ser	Ser	Gly	Thr	Cys	Ile	Asn
		115					120					125			
Pro	Ser	Asn	Trp	Cys	Asp	Gly	Val	Ser	His	Cys	Pro	Gly	Gly	Glu	Asp
		130				135					140				
Glu	Asn	Arg	Cys	Val	Arg	Leu	Tyr	Gly	Pro	Asn	Phe	Ile	Leu	Gln	Met
145					150					155					160
Tyr	Ser	Ser	Gln	Arg	Lys	Ser	Trp	His	Pro	Val	Cys	Gln	Asp	Asp	Trp
				165					170					175	
Asn	Glu	Asn	Tyr	Gly	Arg	Ala	Ala	Cys	Arg	Asp	Met	Gly	Tyr	Lys	Asn
			180					185					190		
Asn	Phe	Tyr	Ser	Ser	Gln	Gly	Ile	Val	Asp	Asp	Ser	Gly	Ser	Thr	Ser
		195				200						205			
Phe	Met	Lys	Leu	Asn	Thr	Ser	Ala	Gly	Asn	Val	Asp	Ile	Tyr	Lys	Lys
					215						220				
Leu	Tyr	His	Ser	Asp	Ala	Cys	Ser	Ser	Lys	Ala	Val	Val	Ser	Leu	Arg
225				230						235					240
Cys	Leu	Ala	Cys	Gly	Val	Asn	Leu	Asn	Ser	Ser	Arg	Gln	Ser	Arg	Ile
				245					250					255	
Val	Gly	Gly	Glu	Ser	Ala	Leu	Pro	Gly	Ala	Trp	Pro	Trp	Gln	Val	Ser
			260					265					270		
Leu	His	Val	Gln	Asn	Val	His	Val	Cys	Gly	Gly	Ser	Ile	Ile	Thr	Pro
		275				280						285			
Glu	Trp	Ile	Val	Thr	Ala	Ala	His	Cys	Val	Glu	Lys	Pro	Leu	Asn	Asn
		290				295					300				
Pro	Trp	His	Trp	Thr	Ala	Phe	Ala	Gly	Ile	Leu	Arg	Gln	Ser	Phe	Met
305					310					315					320
Phe	Tyr	Gly	Ala	Gly	Tyr	Gln	Val	Gln	Lys	Val	Ile	Ser	His	Pro	Asn
				325					330					335	
Tyr	Asp	Ser	Lys	Thr	Lys	Asn	Asn	Asp	Ile	Ala	Leu	Met	Lys	Leu	Gln
			340					345					350		
Lys	Pro	Leu	Thr	Phe	Asn	Asp	Leu	Val	Lys	Pro	Val	Cys	Leu	Pro	Asn
		355					360					365			

02973.00035  
 LBRI-147  
 LIO-81

Pro Gly Met Met Leu Gln Pro Glu Gln Leu Cys Trp Ile Ser Gly Trp  
 370 375 380  
 Gly Ala Thr Glu Glu Lys Gly Lys Thr Ser Glu Val Leu Asn Ala Ala  
 385 390 395 400  
 Lys Val Leu Leu Ile Glu Thr Gln Arg Cys Asn Ser Arg Tyr Val Tyr  
 405 410 415  
 Asp Asn Leu Ile Thr Pro Ala Met Ile Cys Ala Gly Phe Leu Gln Gly  
 420 425 430  
 Asn Val Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu Val Thr Ser  
 435 440 445  
 Asn Asn Asn Ile Trp Trp Leu Ile Gly Asp Thr Ser Trp Gly Ser Gly  
 450 455 460  
 Cys Ala Lys Ala Tyr Arg Pro Gly Val Tyr Gly Asn Val Met Val Phe  
 465 470 475 480  
 Thr Asp Trp Ile Tyr Arg Gln Met Lys Ala Asn Gly  
 485 490

<210> 15  
 <211> 23  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> BLOCKS BL00495

<400> 15  
 Ala Gly Gly Gly Asp Cys Gly Asp Ser Gly Gly Pro Leu Val Cys Asn  
 1 5 10 15  
 Arg Trp Leu Gly Thr Ser Trp  
 20

<210> 16  
 <211> 12  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> BLOCKS BL1253G

<400> 16  
 Asp Cys Gln Gly Asp Ser Gly Gly Pro Leu Val Cys  
 1 5 10

02973.00035  
 LBRI-147  
 LIO-81



<210> 17  
 <211> 17  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> BLOCKS BL00134A

<400> 17  
 Cys Gly Gly Thr Leu Ile Asp Ala Gln Trp Val Leu Thr Ala Ala His  
 1 5 10 15  
 Cys

<210> 18  
 <211> 38  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> BLOCKS BL00021D

<400> 18  
 Gly Pro Leu Val Cys Glu Gln Asn Asn Arg Trp Tyr Leu Gly Val Thr  
 1 5 10 15  
 Ser Trp Gly Gly Cys Gly Gln Arg Asn Lys Pro Gly Val Tyr Thr Lys  
 20 25 30  
 Val Thr Leu Pro Trp Ile  
 35

<210> 19  
 <211> 24  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> BLOCKS BL01243H

<400> 19  
 Tyr Leu Gly Ser Trp Gly Gly Cys Gly Gln Arg Asn Lys Pro Gly Val  
 1 5 10 15  
 Tyr Thr Lys Val Thr Leu Trp Ile  
 20

02973.00035  
 LBRI-147  
 LIO-81



<210> 23  
<211> 12  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> BLOCKS BL01209

<400> 23  
Cys Asp Gly Val Val Asp Cys Lys Lys Ser Asp Glu  
1 5 10

<210> 24  
<211> 20  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> BLOCKS BL01253F

<400> 24  
Ala Ser Phe Leu Arg Glu Gln Val Leu Lys Cys Val Tyr Ser Thr Pro  
1 5 10 15  
Met Cys Ala Gly  
20

<210> 25  
<211> 17  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> BLOCKS BL00495L

<400> 25  
Ser Ser Ile Glu Ile Ile Ile Asn Tyr Glu Tyr Asp Ile Ala Leu Leu  
1 5 10 15  
Pro

<210> 26  
<211> 14  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> BLOCKS BL00134C

<400> 26  
Pro Gly Val Tyr Thr Lys Val Thr Glu Val Leu Pro Trp Ile  
1 5 10

02973.00035  
LBRI-147  
LIO-81

<210> 27  
 <211> 10  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> BLOCKS BL01253D

<400> 27  
 Cys Gly Gly Leu Ile Trp Val Leu Thr Ala  
 1 5 10

<210> 28  
 <211> 834  
 <212> DNA  
 <213> Homo sapiens

<400> 28  
 gctgggctgc gtgagggttg actgggacaa gtctctgctt aaaatctact ctgggtcctc 60  
 ccatcagtggt cttcccatct gtagcagcaa ctggaatgac tcctactcag agaagacctg 120  
 ccagcagctg ggtttcgaga gtgctcaccg gacaaccgag gttgcccaca gggattttgc 180  
 caacagcttc tcaatcttga gatacaactc caccatccag gaaagcctcc acaggtctga 240  
 atgcccttcc cagcgggtata tctccctcca gtgttcccac tgcggactga gggccatgac 300  
 cgggcggtac gtgggagggg cgctggcctc ggatagcaag tggccttggc aagtgaagtct 360  
 gcacttcggc accaccaca tctgtggagg cacgctcatt gacgcccagt ggggtgtcac 420  
 tgccgcccac tgcttcttcg tgacccgga gaaggtcctg gagggctgga aggtgtacgc 480  
 gggcaccagc aactgcacca gttgcctgag gcagctccat tgccgagatc atcatcaaca 540  
 ccaattacac cgatgaggag gacgactatt gacatcgccc tcatgcggtt gttccaagcc 600  
 cctgaacctg tccgtcacat ccacctgct tgcctcccc atgcatggac agacctttag 660  
 cctcaatgag acctgttga tcacaggctt tggcaaagac agggagacag atgaaaagac 720  
 atcccccttc ctggggagggt gcaggtcaat ctcatcgact tccagaaatg caatgactaa 780  
 ctggtctatg acagtacctt acccaaggat gatgtgtgtg gggaacttcg tggg 834

<210> 29  
 <211> 621  
 <212> DNA  
 <213> mouse

<400> 29  
 agatcatcat ctgccagggtc agcctccacg acatcctccc caacgagagt gtaccttggt 60  
 agagcaacac cagtggggggc tgtcccatc cgggcatctc ctgccagggtc agcaccagcc 120  
 accagggcca ccagggtaga gccagggtct cagtttcccc aagttctcct ggtcaggaga 180  
 cccagaggca gctgccactc atcgggtgtg tcatccttct catcagcctg gtgatctcgc 240  
 tcatccttct cttctacttc tggagagtgc cacacaggga tcaagtacaa agagccactg 300  
 gagagtgtgc ctatccacgc agttcgctgt gatggagtgg tggacttgca aaatgaagag 360  
 cgatgagctg ggctgtgtca ggttcgactg ggacaagtcc ctctgaaag tctactctgg 420  
 gtcttctggc agagtggctt cctgtctgca gcagcagcg aacgacactg actccaagag 480  
 gacctgccag caagctggga tttgacagcg cttaccgaac aactgaggta gcccacagag 540  
 acatcaccag cagcttctaa ctctcgaaa caaaacaaca tccaggaaa gctctacagg 600  
 togaatgtct tccggcggtat g 621

02973.00035  
 LBRI-147  
 LIO-81

<210> 30  
 <211> 678  
 <212> DNA  
 <213> mouse

<400> 30  
 tcagcctcca cgacatcctc cccaacgaga gtgtaccttg ttagagcaac accagtgggg 60  
 gctgtcccca tccgggcata tcttgccagg tcagcaccag ccaccagggc caccagggag 120  
 agcccagggtc tcagtttccc caagtttctc tggcaggaga cccagaggca gctgccactc 180  
 atcgggtgtg tcatccttct catcagcctg gtgatctgc tcatccttct cttctacttc 240  
 tggagaggcc acacagggat caagtacaaa gagccactgg agagttgcc tatccacgca 300  
 gttcgctgtg atggagtggg ggactgcaaa atgaagagcg atgagctggg ctgtgtcagg 360  
 ttcgactggg acaagtccct cctgaaagtc tactctgggt cttctggcga gtggcttcct 420  
 gctcgacgca gcagctggaa cgacactgac tccaagagga cctgccagca gctgggattt 480  
 gacagcgctt accgaacaac tgaggtagcc cacaggaaca tcaccagcag cttcttactc 540  
 tccgaataca acaccaccat ccaggaaagc ctctacaggt cgcaatgtcc ttccggcggt 600  
 atgtctccct ccagtgttcc cacgtggttt ggagctatga cgggcggacg aggaggggtc 660  
 gacctcgaag catgcctg 678

<210> 31  
 <211> 577  
 <212> DNA  
 <213> mouse

<400> 31  
 aagttttgat tacgcgcttt ctgcaattga tctcttggtt tttaaacc aa cggtttcagg 60  
 tcaatctttg gagtatttgt agcttcta at ttttgaaatg actgaattaa gaatttggat 120  
 gcttgctctt ttggttggtt tgcctaaaat ccagcccaca atccagtcgt ctcttgggag 180  
 agggaggtgc cttgcaaact ttcatataac gaatgtgcct gaggtgctt aactctggac 240  
 tagtctcaga tctcaaacct gcactacacg aggaggcata cttttgcttc atctggacat 300  
 ttagaatact gtaaccttgc tgccgttctg ttagattgct aactacgtcc cccgtctcca 360  
 atttggtctt ccttaggcga taggatttgt cgtttttaac ggcaataaac ttgacaacac 420  
 cagaatccaa gttttacttg aaaagctcgg cagaatacac agtggtgtga caaaaaacc aa 480  
 cagcaaaggg ttcctttgtg caatgacaaa cggtaaaaat gctgtaacgt tgaagaataa 540  
 ctatttccac gcaagaacct cctgcttgac tgtgtat 577

<210> 32  
 <211> 688  
 <212> DNA  
 <213> mouse

<400> 32  
 ggtgatctcg ctccatccgt tctctttctac ttctggagag tgccacacac gggatcaagt 60  
 acaacggagc cactggagag ttgccctatc cacgcagttc gctgtgatgg agtgggtggac 120  
 tgcaaaatga agcagcgata gagctgggct gtgtcagggt cgactgggac aagtccctcc 180  
 tgaaagtota ctctgggtct tctggcgagt ggcttctgt ctgcagcagc gagctggaac 240  
 gacactgact ccaagaggac ctgccagcag ctgggattct gacagcgctt accgaacaac 300  
 tgaggtagcc cactagagac tgtcaccagc agcttcttga ctctccgaat acgacaccac 360  
 caatccagga aagcctctac aggtcgcaat atccttcccg gcggtaatgg tctcccatcc 420  
 agtgttccca ctgtgggttg agagcctatg accgggcgga tctgtgggag cggtctgaa 480  
 cctcgagag caagtgcgcc ctggctaagt tagcctgcac ttccggcaact acccacattc 540  
 tgtggcgcca cacttcatcg atagcccagt gtgttctcca ccggttgcca ccgttttttg 600

02973.00035  
 LBRI-147  
 LIO-81

tgaccccgca	acaacctctt	aacaagtgac	aacacctttt	tccaccacaa	atgtcccacg	660
accacaagt	ccttctcccc	aactcttg				688

<210> 33  
 <211> 614  
 <212> DNA  
 <213> mouse

<400> 33						
ccagatcatc	atcaacggca	actacacaga	tgaacaggat	gactatgaca	ttgccctcat	60
caggctgtcc	aagccoctga	ccctgtcagc	tcacatccac	cctgcctgcc	tcccgatgca	120
cggtcagacc	ttcggcctca	atgagacctg	tggatcacgg	gcttggcaaa	accaaggaga	180
cagatgagaa	gacatctccc	ttcctccgag	aggttcaggt	caacctcatt	gacttcaaga	240
agtgcaatga	ctacttggtc	tatgacagct	accttacccc	aaggatgatg	tgtgccgggg	300
atctacgagg	agggagggac	tctgcccagg	gagacagtgg	aggacctctc	gtctgtgagc	360
agaacaatcg	ctggtacctg	gcagggtgtca	ccagctgggg	cacaggctgt	ggccagaaaa	420
acaagcctgg	tgtgtacacc	aaagtgacag	aagtacttcc	ctggatttac	agaaagatgg	480
agagtgaggt	acgattccgg	aaatcttaac	catgtcctcc	tcacgtagct	gactgctatg	540
aagatcctgg	gcacagggat	ggggccattt	gcagccatct	ggtacagtgg	acaacaagca	600
cctttggttc	tccc					614

<210> 34  
 <211> 751  
 <212> DNA  
 <213> Homo sapiens

<400> 34						
aagcctggag	gactcttccc	ctcagagacc	atggagaggg	acagccacgg	gaatgcatct	60
ccagcaagaa	caccttcaga	ctggagcatc	tccagcccag	gcattctccag	ctgggacacc	120
tccaggccgg	gcatctccag	cccaggcatc	actttccagg	tcctcatcct	ggcaggatcat	180
catccgccag	gtcagcctcg	gtgacaacct	ccccaaccag	agtgtacctt	gttagagcaa	240
caccagtggg	ggctgtacct	atccgatcat	ctcctgccag	gtcagcacca	gcaaccaggg	300
ccacagtgga	gagcccaggt	acgagcctga	ccaagttaa	ctgagcaggg	agggccagaa	360
gcagctaccg	actcatcgga	gtgcagtgtc	cactcctcat	tgccctggat	ggtttacgct	420
catcatcctc	ttccagttct	ggcagggcac	acagggatca	aggtcacaa	gagcaagatg	480
tgtgagagct	tgteccaaag	cacgcctgtt	cgcttgtgca	cggggtgtat	gggacttcca	540
aagactgaag	aggtgacaga	cgctgtgcta	gcgtgaggta	ttgactggga	ccaacgtctc	600
tgttttaaaa	tcttactctg	ggtccctcca	atcagtggga	tcccatctgt	agcagcacct	660
gggaattgac	tctactacag	agaagactgc	cagcgagtgg	gatcaaagag	gtccccggga	720
cacgaggtgg	ccacaggatt	ggcaaagatt	a			751

02973.00035  
 LBRI-147  
 LIO-81

<210> 35  
 <211> 1230  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> misc\_feature  
 <222> (1)...(1230)  
 <223> n = A,T,C or G

<400> 35  
 atgaccacgc tgtctgcttc tttttctcta gtccagttct ggcagnncca cacagnnacc 60  
 aggtacaagg agcagaggga gagctgtccc aagcacgctg ttcgctgtga cgggggtggtg 120  
 gactgcaagc tgaagagtga cgagctgggc tgcgtgaggt ttgactggga caagtctctg 180  
 cttaaaatct actctgggtc ctcccatcag tggcttccca tctgtagcag caactggaat 240  
 gactcctact cagagaagac ctgccagcag ctgggtttcg agagtgtca cgggacaacc 300  
 gaggttgccc acagggattt tgccaacagc ttctcaatct tgagatacaa ctccaccatc 360  
 caggaaagcc tccacaggtc tgaatgccct tcccagcggg atatctctct ccagtgttcc 420  
 cactgcggaac tgagggccat gaccgggcgg atcgtgggag gggcgctggc ctcggaatagc 480  
 aagtggcctt ggcaagtga tctgcacttc ggcaaccacc acatctgtgg aggcacgctc 540  
 attgacgccc agtgggtgct cactgccgcc cactgcttct tcgtgaccgc ggagaaggtc 600  
 ctggagggtc ggaagggtga cgcgggcacc agcaacctgc accagttgcc tgaggcagcc 660  
 tccattgccg agatcatcat caacagcaat tacaccgatg aggaggacga ctatgacatc 720  
 gccctcatgc ggctgtccaa gccctgacc ctgtccggtg agggaaatctg cactccccgc 780  
 tctcctgccc ccagccccca gcaccctctg cagccctcgc acttgtcagc atctgtcaac 840  
 tcatatcccg gccccaaagc ttctgcagac aagacatccc ccttcctccg ggaggtgcag 900  
 gtcaatctca tcgacttcaa gaaatgcaat gactacttgg tctatgacag ttaccttacc 960  
 ccaaggatga tgtgtgctgg ggaccttctg gggggcagag actcctgcca gggagacagc 1020  
 ggggggcctc ttgtctgtga gcagaacaac cgctgggtacc tggcaggtgt caccagctgg 1080  
 ggcacaggct gtggccagag aaacaaacct ggtgtgtaca ccaaagtgaac agaagttctt 1140  
 ccctggattt acagcaagat ggaggcgagg tgcgattcag aaaatcctaa ccagctggcc 1200  
 tgctgctctg cacagcaccg gctgctgtga 1230

<210> 36  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Random oligonucleotide

<400> 36  
 tcaactgact agatgtacat ggac 24

02973.00035  
 LBRI-147  
 LIO-81